ROAD SYSTEM

BRIDGES

BR 2-010A ON SR 6 OVER DUCK CREEK, WOODLAND BEACH

PROJECT SCOPE/DESCRIPTION: Bridge 2-010A provides the only access to Woodland Beach. Traffic will be maintained during the construction. Rehabilitation work will include replacement of the wearing surface; repair of the existing prestressed beam superstructure by epoxy injection; repair of the substructure though concrete patching, epoxy injection, and member reconstruction; repair of the piles by jacketing; minor approach work; and safety improvements.

PROJECT JUSTIFICATION: The bridge is in need of repair to maintain and extend the life of this single access to this local town and is currently ranked 107th out of 1,399 on the department's bridge deficiency list (via the bridge management program).

County: Kent

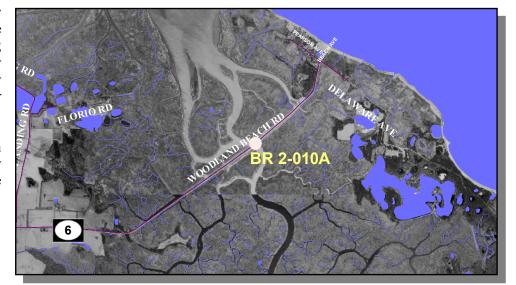
Municipality:

Funding Program: Road System – Bridges

Functional Category: Preservation

Representative District: 28 **Senatorial District:** 14







BR 2-010A ON SR 6 OVER DUCK CREEK, WOODLAND BEACH (CONTINUED)

Bridge 2-010A





BR 2-010A ON SR 6 OVER DUCK CREEK, WOODLAND BEACH (CONTINUED)

Project	Funding Type	Original Estimate	Current Estimate	Authorization	Committed as of 06/30/04	Expended as of 06/30/04	Committed Unexpended as of 06/30/04	Authorization Available
BR 2-010A on SR 6 over Duck Creek,								
Woodland Beach		\$ 1,049.4						
Prior Years	State			\$ 20.4	\$ 20.4	\$ 16.8	\$ 3.6	\$ 0.0
	Federal			\$ 81.6	\$ 0.0	\$ 0.0	\$ 0.0	\$ 81.6
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2004	State		\$ 1,049.4	\$ 189.5	\$ 173.0	\$ 0.0	\$ 173.0	\$ 16.5
	Federal			\$ 757.9	\$ 757.9	\$ 62.0	\$ 694.9	\$ 81.6
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2005 Authorized	State			\$ 0.0				\$ 16.5
	Federal			\$ 0.0				\$ 81.6
	Other			\$ 0.0				\$ 0.0
FY 2006 Projected	State			\$ 0.0				\$ 16.5
112000110Jeeced	Federal			\$ 0.0				\$ 81.6
	Other			\$ 0.0				\$ 0.0
FY 2007 Projected	State			\$ 0.0				\$ 16.5
F1 2007 110Jecteu	Federal			\$ 0.0				\$ 81.6
	Other			\$ 0.0				\$ 0.0
FY 2008-2010 Projected	State			\$ 0.0				\$ 16.5
F 1 2008-2010 110jecteu	Federal			\$ 0.0				\$ 81.6
	Other			\$ 0.0				\$ 0.0
Total Projected	State			\$ 209.9	\$ 193.4			\$ 16.5
	Federal			\$ 839.5	\$ 757.9			\$ 81.6
	Other		 	\$ 0.0	\$ 0.0			\$ 0.0
Total All Funds		\$ 1,049.4	\$ 1,049.4	\$ 1,049.4	\$ 951.3	\$ 78.8	\$ 871.5	\$ 98.1

BR 2-010A ON SR 6 OVER DUCK CREEK, WOODLAND BEACH (CONTINUED)

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 -2010
	BR 2-010A on SR 6 over Duck Creek, Woodland Beach	PE RW	80% FHWA 100% ST	\$ 102.0 0.0	\$ 102.0 0.0	\$ 0.0 0.0	\$ 0.0 0.0	ψ 0.0	\$ 0.0 0.0	
		С	80% FHWA	947.4	0.0	947.4	0.0	0.0	0.0	0.0
	Total All Funds			\$ 1,049.4	\$ 102.0	\$ 947.4	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0

BR 2-022A ON SR 14, NORTHWEST FRONT STREET OVER MULLET RUN

PROJECT SCOPE/DESCRIPTION: A study will be completed by maintenance forces to determine what improvements need to be completed. These could include minor maintenance, major rehabilitation and reconstruction, and / or total replacement.

PROJECT JUSTIFICATION: This bridge has structural spalls that are compromising the safety of the bridge. The bridge is currently ranked 147th out of 1,399 on the department's bridge deficiency list (via the bridge management program).

County: Kent Municipality: Milford

Funding Program: Road System – Bridges

Functional Category: Preservation

Representative District: 33 **Senatorial District:** 16, 18







BR 2-022A ON SR 14, NORTHWEST FRONT STREET OVER MULLET RUN (CONTINUED)

Project	Funding Type	Original Estimate	Current Estimate	Authorization	Committed as of 06/30/04	Expended as of 06/30/04	Committed Unexpended as of 06/30/04	Authorization Available
BR 2-022A on SR 14, Northwest Front Street								
over Mullet Run		\$ 83.0						
Prior Years	State			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Federal			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	
FY 2004	State		\$ 278.0	\$ 58.0	\$ 53.0	\$ 12.4	\$ 40.6	\$ 5.0
11 2001	Federal		\$ 270.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	
FY 2005 Authorized	State			\$ 220.0				\$ 225.0
1 1 2000 Hathor mou	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2006 Projected	State			\$ 0.0				\$ 225.0
r i 2000 i i ojecteu	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2007 Projected	State			\$ 0.0				\$ 225.0
F1 2007 110jected	Federal			\$ 0.0				\$ 223.0
	Other			\$ 0.0				\$ 0.0
FY 2008-2010 Projected	State			\$ 0.0				\$ 225.0
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
Total Projected	State			\$ 278.0	\$ 53.0			\$ 225.0
	Federal			\$ 0.0	\$ 0.0			\$ 0.0
	Other			\$ 0.0	\$ 0.0			\$ 0.0
Total All Funds		\$ 83.0	\$ 278.0	\$ 278.0	\$ 53.0	\$ 12.4	\$ 40.6	\$ 225.0

BR 2-022A ON SR 14, NORTHWEST FRONT STREET OVER MULLET RUN (CONTINUED)

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 -2010
23-072-01	BR 2-022A on SR 14, Northwest Front Street over Mullet Run	PE RW	100% ST 100% ST	\$ 52.0 6.0	\$ 0.0 0.0	\$ 52.0 6.0	\$ 0.0 0.0	\$ 0.0	\$ 0.0 0.0	*
		С	100% ST	220.0	0.0	0.0	220.0	0.0	0.0	0.0
	Total All Funds			\$ 278.0	\$ 0.0	\$ 58.0	\$ 220.0	\$ 0.0	\$ 0.0	\$ 0.0

BR 2-050B ON SR 8, HALLTOWN ROAD, OVER TAPPAHANNA DITCH

PROJECT SCOPE/DESCRIPTION: The proposed work for Bridge 2-050B will consist of replacing the existing concrete structure with a precast concrete box culvert and wingwalls. Riprap will be placed at the inlet and outlet for scour protection. Steel beam guardrail will also be placed.

PROJECT JUSTIFICATION: The existing structure is a concrete box culvert in poor condition. Both the box culvert and the wingwalls have several areas of delaminations and spalling. The bridge is currently ranked 167th out of 1,399 on the department's bridge deficiency list (via the bridge management program).

County: Kent

Municipality:

Funding Program: Road System – Bridges

Functional Category: Preservation

Representative District: 29 **Senatorial District:** 15







BR 2-050B ON SR 8, HALLTOWN ROAD, OVER TAPPAHANNA DITCH (CONTINUED)

Bridge 2-050B on SR 8, Halltown Road



Underside of Bridge 2-050B



BR 2-050B ON SR 8, HALLTOWN ROAD, OVER TAPPAHANNA DITCH (CONTINUED)

PROJECT FUNDING INFORMATION

DEPARTMENT OF TRANSPORTATION

Project	Funding Type	Original Estimate	Current Estimate	Authorization	Committed as of 06/30/04	Expended as of 06/30/04	Committed Unexpended as of 06/30/04	Authorization Available
BR 2-050B on SR 8, Halltown Road,								
over Tappahanna Ditch		\$ 635.0						
Prior Years	State			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
Thor rears	Federal			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Other			3 0.0	\$ 0.0	3 0.0	\$ 0.0	\$ 0.0
FY 2004	State		\$ 701.4	\$ 83.0	\$ 83.0	\$ 0.0	\$ 83.0	\$ 0.0
	Federal			\$ 66.4	\$ 32.0	\$ 0.0	\$ 32.0	\$ 34.4
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2005 Authorized	State			\$ 110.4				\$ 110.4
	Federal			\$ 441.6				\$ 476.0
	Other			\$ 0.0				\$ 0.0
FY 2006 Projected	State			\$ 0.0				\$ 110.4
	Federal			\$ 0.0				\$ 476.0
	Other			\$ 0.0				\$ 0.0
FY 2007 Projected	State			\$ 0.0				\$ 110.4
.,	Federal			\$ 0.0				\$ 476.0
	Other			\$ 0.0				\$ 0.0
FY 2008-2010 Projected	State			\$ 0.0				\$ 110.4
	Federal			\$ 0.0				\$ 476.0
	Other			\$ 0.0				\$ 0.0
Total Projected	State			\$ 193.4	\$ 83.0			\$ 110.4
	Federal			\$ 508.0	\$ 32.0			\$ 476.0
	Other			\$ 0.0	\$ 0.0			\$ 0.0
Total All Funds		\$ 635.0	\$ 701.4	\$ 701.4	\$ 115.0	\$ 0.0	\$ 115.0	\$ 586.4

BR 2-050B ON SR 8, HALLTOWN ROAD, OVER TAPPAHANNA DITCH (CONTINUED)

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 -2010
24-072-01	BR 2-050B on SR 8, Halltown Road, over Tappahanna Ditch	PE RW	80% FHWA 100% ST	\$ 83.0 66.4	\$ 0.0 0.0	\$ 83.0 66.4	\$ 0.0 0.0	\$ 0.0	\$ 0.0 0.0	
		С	80% FHWA	552.0	0.0	0.0			0.0	0.0
	Total All Funds			\$ 701.4	\$ 0.0	\$ 149.4	\$ 552.0	\$ 0.0	\$ 0.0	\$ 0.0

BR 2-113B AND BR 2-113C ON K113, CATTAIL BRANCH ROAD

PROJECT SCOPE/DESCRIPTION: The proposed work for each bridge will consist of replacing each existing structure with a precast concrete rigid frame. Approaches for both bridges will be reconstructed with steel beam guardrail added. Riprap will be placed at the openings of each structure to provide protection from the effects of scour.

PROJECT JUSTIFICATION: The existing bridges are corrugated steel pipes in poor condition. The corrosion at the waterline present in each structure will only worsen and needs to be fixed. These bridges currently rank 402nd and 404th, respectively, out of 1,399 on the department's bridge deficiency list (via the bridge management program).

County: Kent

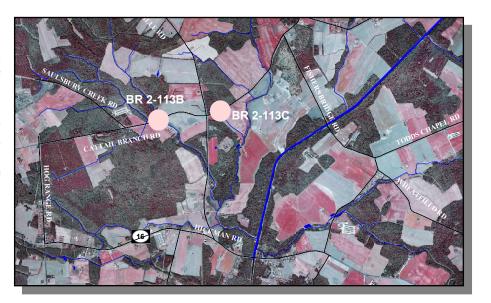
Municipality:

Funding Program: Road System – Bridges

Functional Category: Preservation

Representative District: 30 **Senatorial District:** 16







BR 2-113B AND BR 2-113C ON K113, CATTAIL BRANCH ROAD (CONTINUED)

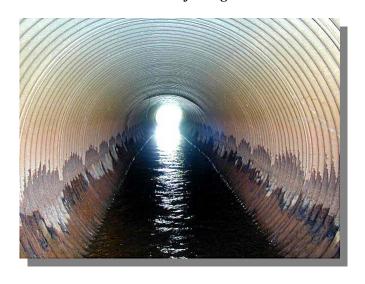
Bridge 2-113B



Bridge 2-113C



Underside of Bridge 2-113B



Underside of Bridge 2-113C



DEPARTMENT OF TRANSPORTATION

BR 2-113B AND BR 2-113C ON K113, CATTAIL BRANCH ROAD (CONTINUED)

Project	Funding Type	Original Estimate	Current Estimate	Authorization	Committed as of 06/30/04	Expended as of 06/30/04	Committed Unexpended as of 06/30/04	Authorization Available
DD 4 442D LDD 4 442C								
BR 2-113B and BR 2-113C on K113, Cattail Branch Road		\$ 1,040.0						
Prior Years	State			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Federal			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2004	State		\$ 281.0	\$ 26.2	\$ 26.2	\$ 8.6	\$ 17.6	\$ 0.0
	Federal		V =0.511	\$ 104.8	\$ 104.8	\$ 34.6	\$ 70.2	
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	
FY 2005 Authorized	State			\$ 150.0				\$ 150.0
1 1 2005 Nutriorized	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2006 Projected	State			\$ 0.0				\$ 150.0
F1 2000 Frojected	Federal			\$ 0.0				\$ 150.0
	Other			\$ 0.0				\$ 0.0
FY 2007 Projected	State			\$ 0.0				\$ 150.0
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2008-2010 Projected	State			\$ 0.0				\$ 150.0
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
Total Projected	State			\$ 176.2	\$ 26.2			\$ 150.0
1 otal Frojecteu					\$ 26.2 \$ 104.8			
	Federal Other			\$ 104.8 \$ 0.0	\$ 104.8 \$ 0.0			\$ 0.0 \$ 0.0
Total All Funds		\$ 1,040.0	\$ 281.0	\$ 281.0	\$ 131.0	\$ 43.2	\$ 87.8	\$ 150.0

BR 2-113B AND BR 2-113C ON K113, CATTAIL BRANCH ROAD (CONTINUED)

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 -2010
23-072-02	BR 2-113B and BR 2-113C on K113, Cattail Branch Road	PE	80% FHWA	\$ 131.0	\$ 0.0	\$ 131.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
		RW	80% FHWA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		С	80% FHWA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Maintenance	С	100% ST	150.0	0.0	0.0	150.0	0.0	0.0	0.0
	Total All Funds			\$ 281.0	\$ 0.0	\$ 131.0	\$ 150.0	\$ 0.0	\$ 0.0	\$ 0.0

BR 2-210A ON K210, SHADY BRIDGE ROAD OVER SHADES BRANCH, SOUTH OF MARYDEL

PROJECT SCOPE/DESCRIPTION: This project will involve the replacement of the existing steel girder/timber deck bridge on K210, Shady Bridge Road with a prestressed concrete bridge with pile-supported abutments, protected by riprap. Work may include re-alignment of the approaches. Each approach will have guardrail placed in front of the abutments to a similar extent as exists now.

PROJECT JUSTIFICATION: The bridge capacity is substandard, and it is functionally obsolete. This bridge is ranked 61st out of 1,399 on the department's bridge deficiency list (via the bridge management program).

County: Kent

Municipality:

Funding Program: Road System – Bridges

Functional Category: Preservation

Representative District: 29 **Senatorial District:** 15









Bridge 2-210A on K210, Shady Bridge Road

BR 2-210A ON K210, SHADY BRIDGE ROAD OVER SHADES BRANCH, SOUTH OF MARYDEL (CONTINUED)

Project	Funding Type	Original Estimate	Current Estimate	Authorization	Committed as of 06/30/04	Expended as of 06/30/04	Committed Unexpended as of 06/30/04	Authorization Available
BR 2-210A on K210, Shady Bridge Road over Shades Branch, South of Marydel		\$ 695.0						
Prior Years	State			\$ 329.4	\$ 329.4	\$ 287.8	\$ 41.6	\$ 0.0
	Federal			\$ 556.0	\$ 448.6	\$ 337.4	\$ 111.2	\$ 107.4
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2004	State		\$ 885.4	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Federal			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 107.4
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2005 Authorized	State			\$ 0.0				\$ 0.0
	Federal			\$ 0.0				\$ 107.4
	Other			\$ 0.0				\$ 0.0
FY 2006 Projected	State			\$ 0.0				\$ 0.0
-	Federal			\$ 0.0				\$ 107.4
	Other			\$ 0.0				\$ 0.0
FY 2007 Projected	State			\$ 0.0				\$ 0.0
*	Federal			\$ 0.0				\$ 107.4
	Other			\$ 0.0				\$ 0.0
FY 2008-2010 Projected	State			\$ 0.0				\$ 0.0
*	Federal			\$ 0.0				\$ 107.4
	Other			\$ 0.0				\$ 0.0
Total Projected	State			\$ 329.4	\$ 329.4			\$ 0.0
	Federal			\$ 556.0	\$ 448.6			\$ 107.4
	Other			\$ 0.0	\$ 0.0			\$ 0.0
Total All Funds		\$ 695.0	\$ 885.4	\$ 885.4	\$ 778.0	\$ 625.2	\$ 152.9	\$ 107.4

BR 2-210A ON K210, SHADY BRIDGE ROAD OVER SHADES BRANCH, SOUTH OF MARYDEL (CONTINUED)

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 -2010
21-072-01	BR 2-210A on K210, Shady Bridge Road over Shades Branch, South of Marydel	PE RW	100% ST 100% ST	\$ 182.4 8.0	\$ 182.4 8.0	\$ 0.0 0.0		Φ 0.0	\$ 0.0 0.0	\$ 0.0 0.0
		С	80% FHWA	695.0	695.0	0.0	0.0	0.0	0.0	0.0
	Total All Funds			\$ 885.4	\$ 885.4	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0

BR 2-295A ON K295, PEAR TREE LANE, OVER GREEN BRANCH

PROJECT SCOPE/DESCRIPTION: This project will involve the replacement of corrugated metal pipes with a precast concrete box culvert with a depressed invert, using the clear zone concept. Riprap will be placed at the culvert inlet and outlet for scour protection.

PROJECT JUSTIFICATION: The two eight-foot diameter corrugated metal pipes have experienced advanced corrosion at the waterline and are perforated at this location. This bridge is ranked 76th out of 1,399 on the department's bridge deficiency list (via the bridge management program).

County: Kent

Municipality:

Funding Program: Road System – Bridges

Functional Category: Preservation

Representative District: 30 **Senatorial District:** 16





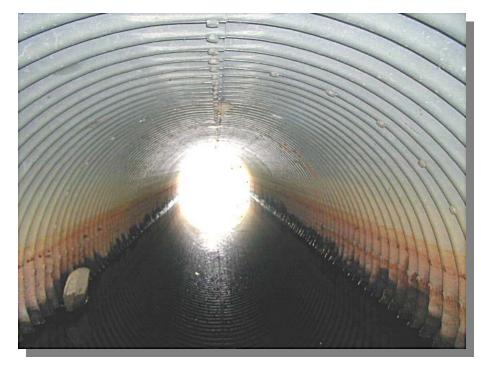


BR 2-295A ON K295, PEAR TREE LANE, OVER GREEN BRANCH (CONTINUED)

Bridge 2-295A on K295, Pear Tree Lane, over Green Branch



Inside Bridge 2-295A



BR 2-295A ON K295, PEAR TREE LANE, OVER GREEN BRANCH (CONTINUED)

STATE OF DELAWARE

Project	Funding Type	Original Estimate	Current Estimate	Authorization	Committed as of 06/30/04	Expended as of 06/30/04	Committed Unexpended as of 06/30/04	Authorization Available
BR 2-295A on K295, Pear Tree Lane, over Green Branch		\$ 532.0						
Prior Years	State			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Federal			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2004	State		\$ 606.0	\$ 96.8	\$ 14.8	\$ 0.4	\$ 14.4	\$ 82.0
	Federal			\$ 59.2	\$ 59.2	\$ 1.6	\$ 57.6	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2005 Authorized	State			\$ 90.0				\$ 172.0
	Federal			\$ 360.0				\$ 360.0
	Other			\$ 0.0				\$ 0.0
FY 2006 Projected	State			\$ 0.0				\$ 172.0
-	Federal			\$ 0.0				\$ 360.0
	Other			\$ 0.0				\$ 0.0
FY 2007 Projected	State			\$ 0.0				\$ 172.0
*	Federal			\$ 0.0				\$ 360.0
	Other			\$ 0.0				\$ 0.0
FY 2008-2010 Projected	State			\$ 0.0				\$ 172.0
•	Federal			\$ 0.0				\$ 360.0
	Other			\$ 0.0				\$ 0.0
Total Projected	State			\$ 186.8	\$ 14.8			\$ 172.0
	Federal			\$ 419.2	\$ 59.2			\$ 360.0
	Other			\$ 0.0	\$ 0.0			\$ 0.0
Total All Funds		\$ 532.0	\$ 606.0	\$ 606.0	\$ 74.0	\$ 2.0	\$ 72.0	\$ 532.0

BR 2-295A ON K295, PEAR TREE LANE, OVER GREEN BRANCH (CONTINUED)

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 -2010
24-072-02	BR 2-295A on K295, Pear Tree Lane, over Green Branch	PE RW	100% ST 100% ST	\$ 70.0 12.0	\$ 0.0 0.0	\$ 70.0 12.0	\$ 0.0 0.0	ψ 0.0	\$ 0.0 0.0	*
		С	80% FHWA	524.0	0.0	74.0	450.0	0.0	0.0	0.0
	Total All Funds			\$ 606.0	\$ 0.0	\$ 156.0	\$ 450.0	\$ 0.0	\$ 0.0	\$ 0.0